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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Jack A. Zeineh

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EXAMINER

SMITH, CAROLYN L

ART UNIT

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/620,016	<b>Applicant(s)</b> ZEINEH ET AL.	
	<b>Examiner</b> Carolyn Smith	<b>Art Unit</b> 1631	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 March 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 36-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 36-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicants' submission, filed 2/2/09, has been entered.

Amended claims 36 and 44, filed 2/2/09, are acknowledged.

Claims herein under examination are 36-44.

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 36-44 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 36-44 are drawn to a process. A process is statutory subject matter under 35 U.S.C. 101 if: (1) it is tied to a particular machine or apparatus or (2) it transforms an article to a different state or thing (In re Bilski, 88 USPQ2d 1385 Fed. Cir. 2008).

The claimed subject matter is not limited to a particular apparatus or machine. To qualify as a statutory process, the claims should require use of a machine within the steps of the claimed subject matter or require transformation of an article to a different state or thing. Insignificant

Art Unit: 1631

extra-solution activity in the claimed subject matter will not be considered sufficient to convert a process that otherwise recites only mental steps into statutory subject matter (In re Grams 12 USPQ2d 1824 Fed. Cir. 1989). Preamble limitations that require the claimed process to comprise machine implemented steps will not be considered sufficient to convert a process that otherwise recites only mental steps into statutory subject matter. It is noted that the instant claim 36 recites “presenting a plurality of objectives for viewing”; however, this step is not a transformation of an article to a different state or thing. It is further noted that claims 36-44 do not explicitly require that the steps of the claimed method are performed on a machine. Applicant is cautioned against introduction of new matter in an amendment.

***Claim Rejections - 35 USC § 112, Second paragraph***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 37-43 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 37, 38, and 42 recite the limitation "said previously-captured image" in lines 1-2 of each. There is insufficient antecedent basis for this limitation in the claim. While there is previous mention of "at least one previously-captured image", it is unclear to which particular image Applicant is referring to in "said previously-captured image". It is unclear if Applicant

Art Unit: 1631

intended to exclude the potential plural portion of the “at least one previously-captured images”.

Clarification of this issue via clearer claim wording is requested. Claims 39-41 and 43 are also rejected due to their dependency from claims 38 and 42.

Applicant argues that the amendments obviate the rejection. This statement is found unpersuasive as the issue still exists, as described above.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 36-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kamentsky et al. (US 5,793,969) in view of Silverbrook (US 5,329,616) and Little et al. (4,922,909).

Kamentsky et al. describe a method for network reviewing of a specimen slide (col. 2, lines 54-55). Kamentsky et al. describe a system for review and analysis of computer encoded microscope slides and specimens originally encoded from a microscope that is retrievable at all remote locations of a network and for comparing an original slide being examined (=real) or

Art Unit: 1631

scanned image of slide that is stored (=virtual) with on-line library cell type images (=virtual) (abstract) and multiple images at different focuses and magnifications are stored and indexed (claim 15) which represents viewing a microscope slide on a screen and providing a microscope slide and at least one previously-captured image of the slide with each image being a representation of the slide at a magnification. Kamensky et al. describe multiple simultaneous reviews of encoded information obtained from slide analysis procedures of a microscope slide including stored images of the slide (col. 2, lines 11-16). Kamensky et al. describe the user can indicate the microscope objective used by clicking one of the buttons on the panel and the user can store multiple images in the computer memory at different focuses and magnifications (col. 8, last paragraph; Figures 2 and 3) which represents presenting a plurality of objectives for viewing said microscope slide to a user. Kamensky et al. describe selecting a patient accession number which causes all of the images of the slide view to be transferred for instantaneous viewing, followed by the user selecting a magnification using buttons in the field and a focus to call up and display the appropriate image (col. 9, second paragraph; Figure 3) which represents selecting a desired objective which corresponds to a desired magnification and if the objective corresponds to one of the previously-captured images, then the previously-captured image is displayed. Kamensky et al. describe slide diagnosis is either directly with the original slide on the microscope or with a scanned image (abstract), moving the microscope stage with the specimen slide and a corresponding computer generated image (i.e. real time) (col. 4, lines 9-14), with the user being able to indicate microscope objective and magnification (col. 8, last paragraph and Figures 2 and 3) as well as the microscope is optionally motor driven with computer control to re-scan slides only at designated sites (abstract) wherein actual imaging of

Art Unit: 1631

the original slide by the user represents obtaining a real-time image at a desired objective and presenting it on the screen. Kamentsky et al. describe review of each image captured is repeated for each annotation by clicking the next field button (col. 8, last paragraph and Figure 2) and retrieving images (col. 7, last paragraph). Kamentsky et al. describe using grayscale display information with variations in shades of gray and degrees of overlap (claim 4) and viewing slides or images of slides only at areas of interest (claim 13) which represents multiple compression levels (i.e. variations in reduced quantity or volume of grayness), as stated in instant claim 37.

Kamentsky et al. describe determining whether there was overlapping of viewing (col. 1, lines 31-33). Kamentsky et al. describe providing automatic location and review of flagged slide specimen view sites (col. 2, lines 30-32). Kamentsky et al. describe moving the slide stage with a specimen slide that is operatively linked to computer means to correlate movement and record locations pursuant to automatic programmed instructions (col. 2, line 61 to col. 3, line 13).

Kamentsky et al. describe network reviewing of a specimen slide that was previously examined with computer encoded movement including correlated recorded markings with areas of interest that are recalled in a computer generated image of the slide (col. 3, lines 24-67) and then placing the specimen slide on the moveable slide stage and moving the stage in correlation with viewing areas with indicia markings on the computer generated image (col. 4, lines 1-14) which represents automatic and sequential shifting regions. Kamentsky et al. describe marking areas of interest (col. 1, lines 57-65) and moving the stage containing the slide specimen to areas with correlated indicia of the computer generated image having a distinguished marking in order to be directly viewed with the microscope (col. 4, lines 9-14 and col. 9, lines 62-63) which represents shifting and overlapping (correlated) regions to obtain an optimal (desirable) image. Kamentsky

Art Unit: 1631

et al. describe relocating slide images at designated sites via a motor driven microscope with computer control (col. 5, lines 35-37 and col. 10, lines 6-10) which represents automatic and sequential shifting of images.

Kamentsky et al. describe transmitting a region of interest to a user (Kamentsky et al.: col. 9, second paragraph and last paragraph), as stated in instant claims 39, 41, and 43. Kamentsky et al. do not describe presenting a real-time image if the second objective is selected or if the objective does not correspond to a previously captured image (claims 36 and 44), compressing an image, selecting and decompressing a portion of the image (claim 38), recompressing the region of interest (claim 40), and image comprised of a plurality of compressed images and creating a region of interest including selecting and decompressing a portion of one or more compressed images (claim 42).

Silverbrook describes compressing a virtual image, selecting and decompressing a portion of the image (abstract; col. 3, paragraph 6; claim 1), recompressing the region of interest (col. 6, paragraph 4), and image comprised of a plurality of compressed images and creating a region of interest including selecting and decompressing a portion of one or more compressed images (abstract; col. 3, paragraph 6; col. 2, line 50 to col. 3, line 68; claims 1, 14-15).

Silverbrook does not describe presenting a real-time image if the second objective is selected or if the objective does not correspond to a previously captured image (claims 36 and 44).

Little et al. describe using a video monitoring apparatus including a microscope that takes a first image (i.e. previously captured image) and a subsequent image (i.e. changing real time image) and establishing dwell times of display for the two types of images including an operator



Art Unit: 1631

(i.e. user) selection that can hold only the selected image on display by stopping transmission of any other image (claims 1, 2, 3, 8, 9).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to compress and decompress the image as taught by Silverbrook in the method of Kamentsky et al. where the motivation would have been to alleviate the need for large image stores and therefore avoid the problems of cost and time since full color graphic images require massive amounts of data, as stated by Silverbrook (col. 1, lines 9-20 and col. 2, third paragraph). It would have been further obvious to one of ordinary skill in the art at the time the invention was made to use the video monitoring apparatus in the methods of Kamentsky et al. and Silverbrook wherein the motivation would have been to monitor changes in the relative spatial relationship of features of a biological tissue, as stated by Little et al. (col. 1, second paragraph).

Thus, Kamentsky et al. in view of Silverbrook and Little et al. make obvious the instant invention.

Applicant argues that Kamentsky et al. and Silverbrook fail to teach all of the limitations in base claims 36 and 44. This statement is found unpersuasive as Little et al. teach the limitations not taught by Kamentsky et al. and Silverbrook, as discussed above.

### ***Conclusion***

No claim is allowed.

Art Unit: 1631

Papers related to this application may be submitted to Technical Center 1600 by facsimile transmission. Papers should be faxed to Technical Center 1600 via the PTO Fax Center. The faxing of such papers must conform to the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993) (See 37 CFR §1.6(d)). The Central Fax Center number for official correspondence is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carolyn Smith, whose telephone number is (571) 272-0721. The examiner can normally be reached Monday through Thursday from 8 A.M. to 6:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marjorie Moran, can be reached on (571) 272-0720.

May 7, 2009

/Carolyn Smith/  
Primary Examiner  
AU 1631